

Network Storage System  
90

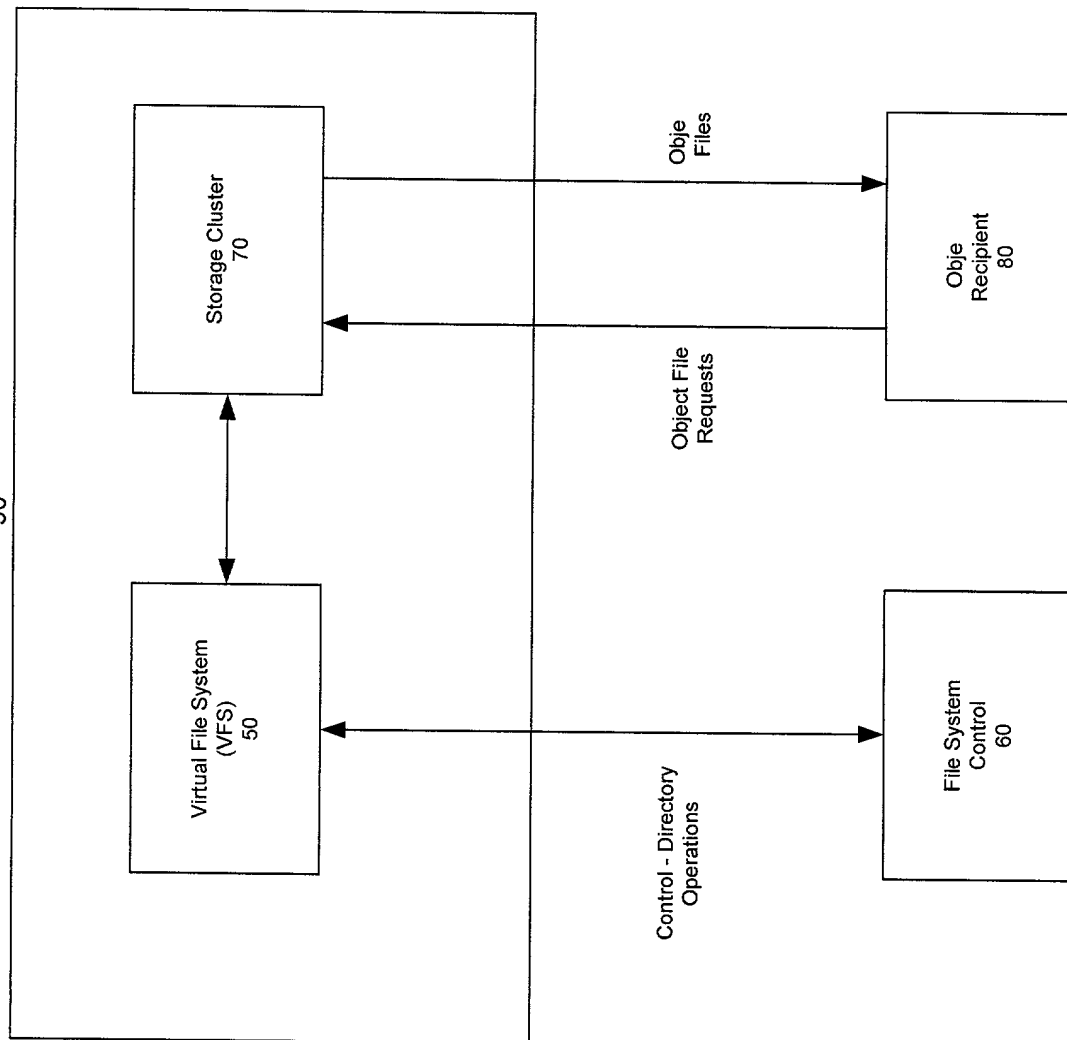
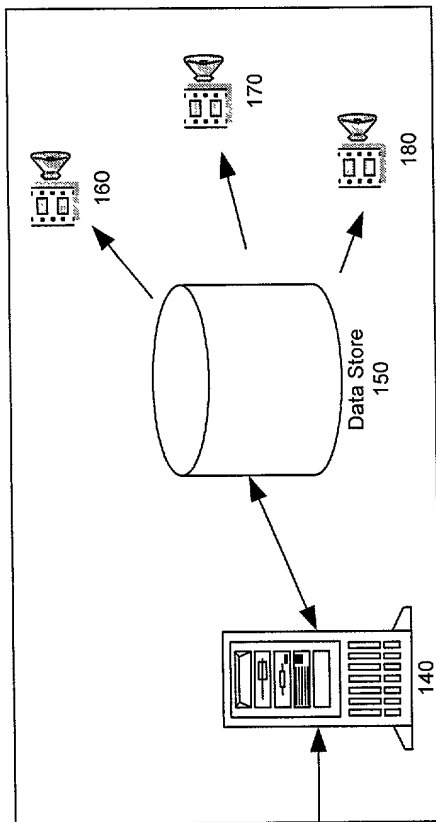
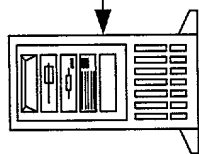


Figure 1

Storage Service  
130



Content Origin Server  
120



HTTP Requests  
For Object Files

HTTP Requests  
for HTML Files

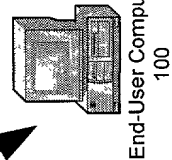
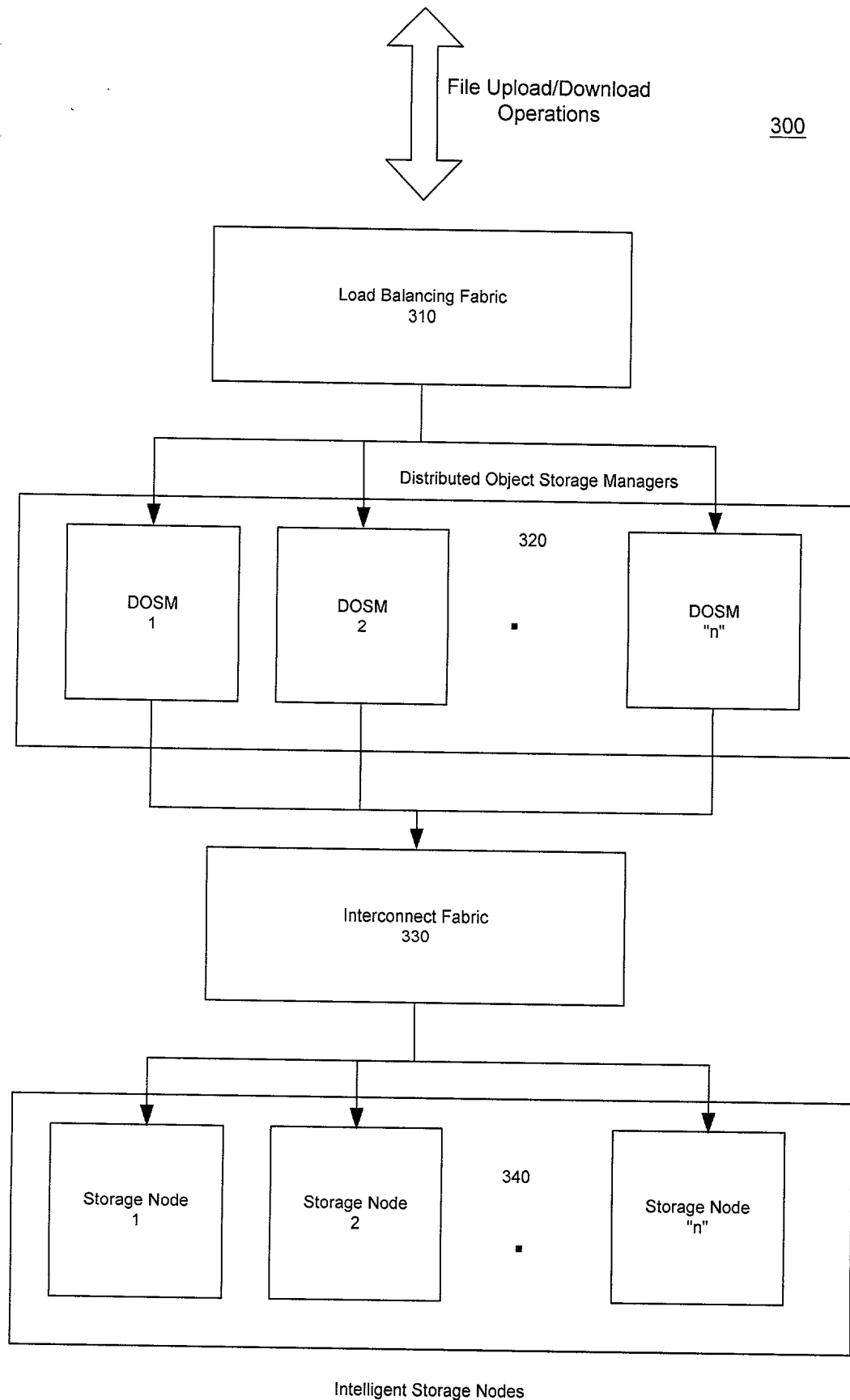
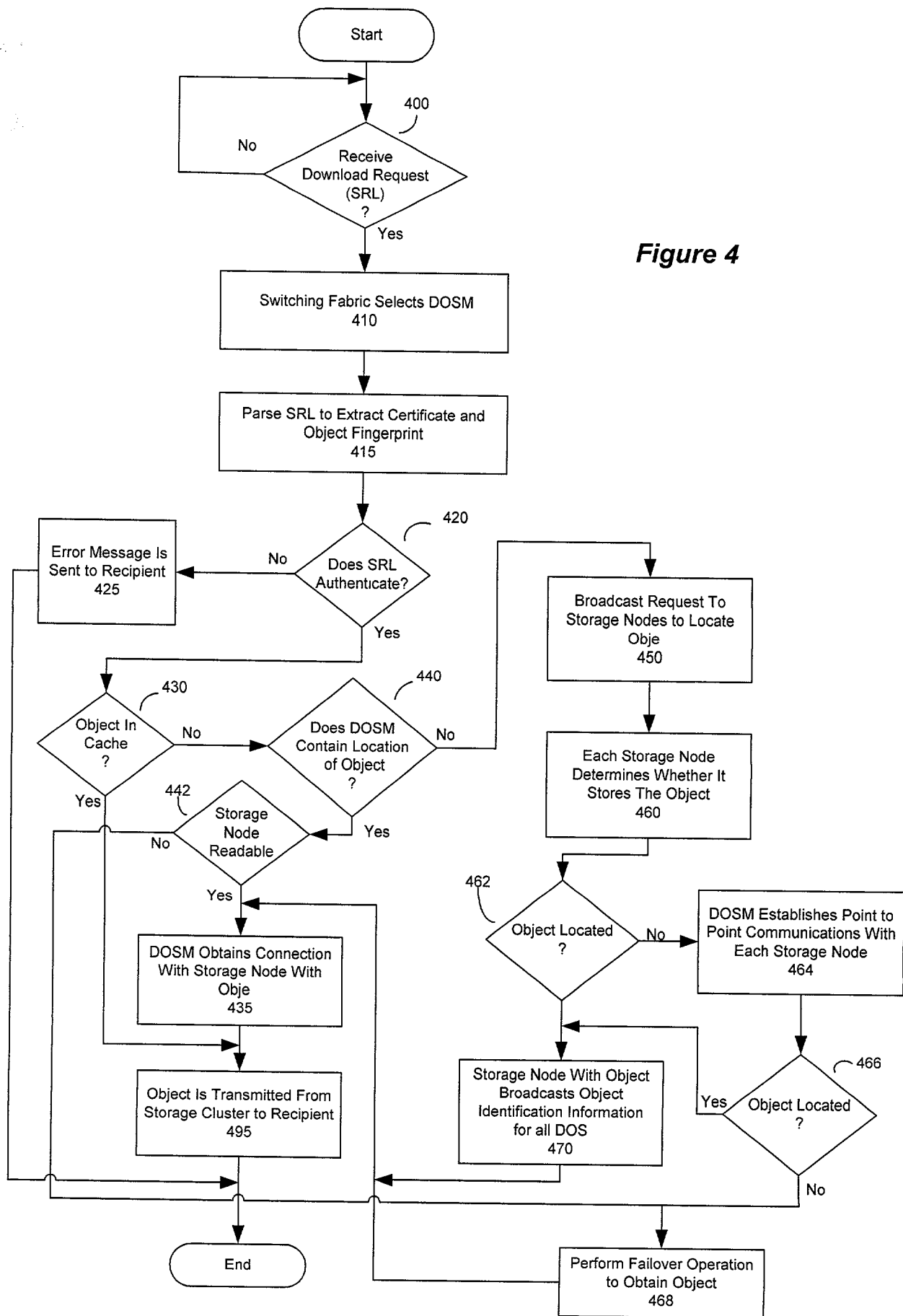


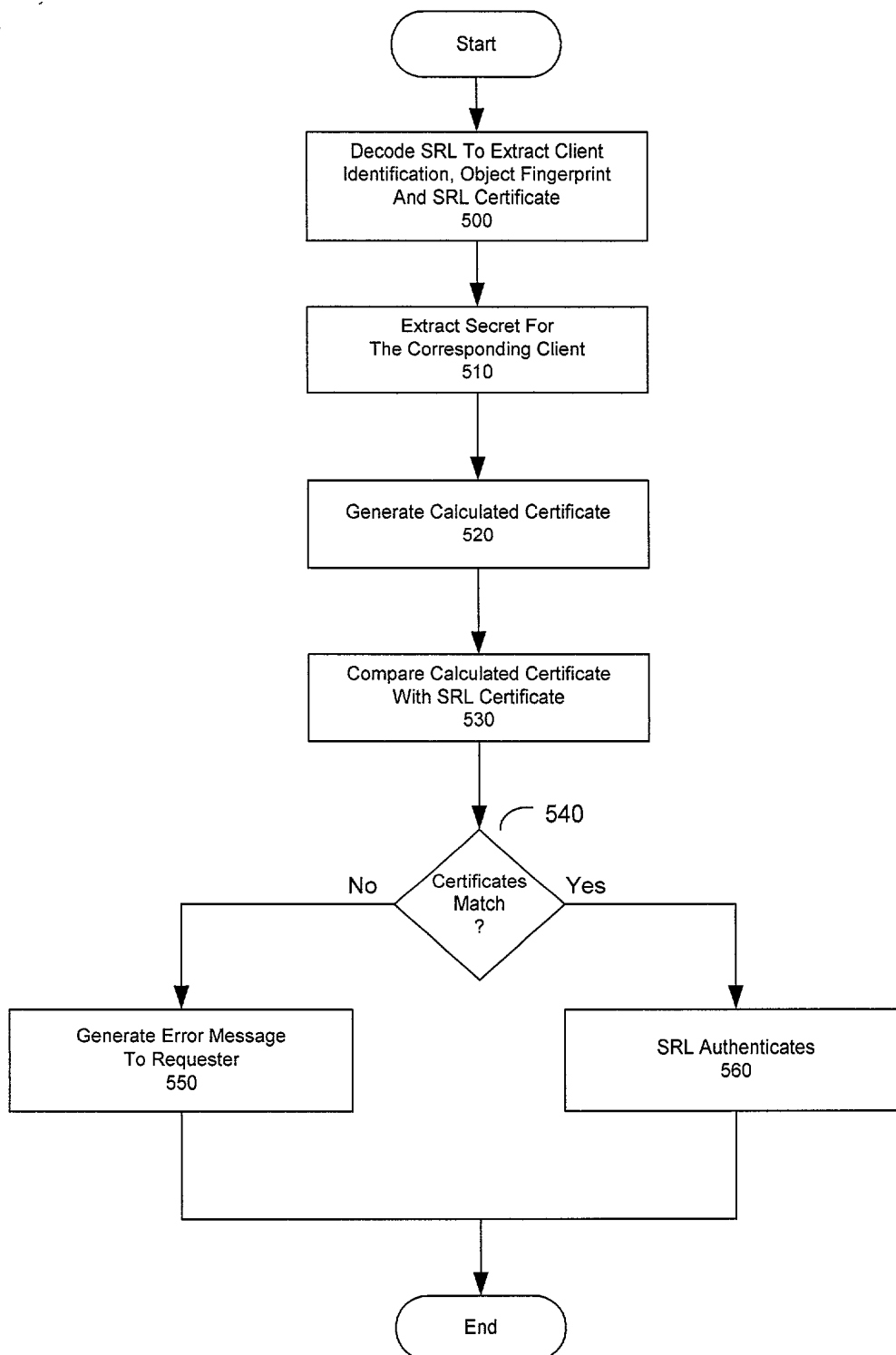
Figure 2



**Figure 3**



**Figure 4**






**Figure 5**

DOSM File Look-up Table  
610

File Id	IP Addr	Disk Id
file1.MD5	10.3.100	3
file2.MD5	10.3.098	1
file3.MD5	10.3.050	6
file4.MD5	10.3.100	2
file5.MD5	10.3.098	1
file6.MD5	10.3.050	8

Data Cache  
620

 Film Snippet
 Advertisement
 Film Preview

State Table  
630

Read - Write State of Storage Nodes
Health of Storage Nodes
Load of Storage Nodes - Storage Capacity - Number of I/O Operatio Per Second

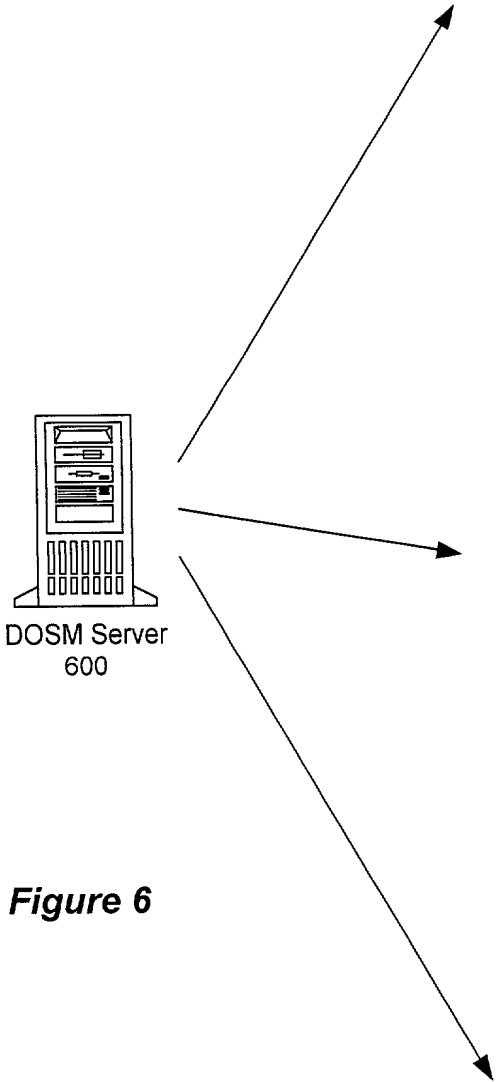


Figure 6

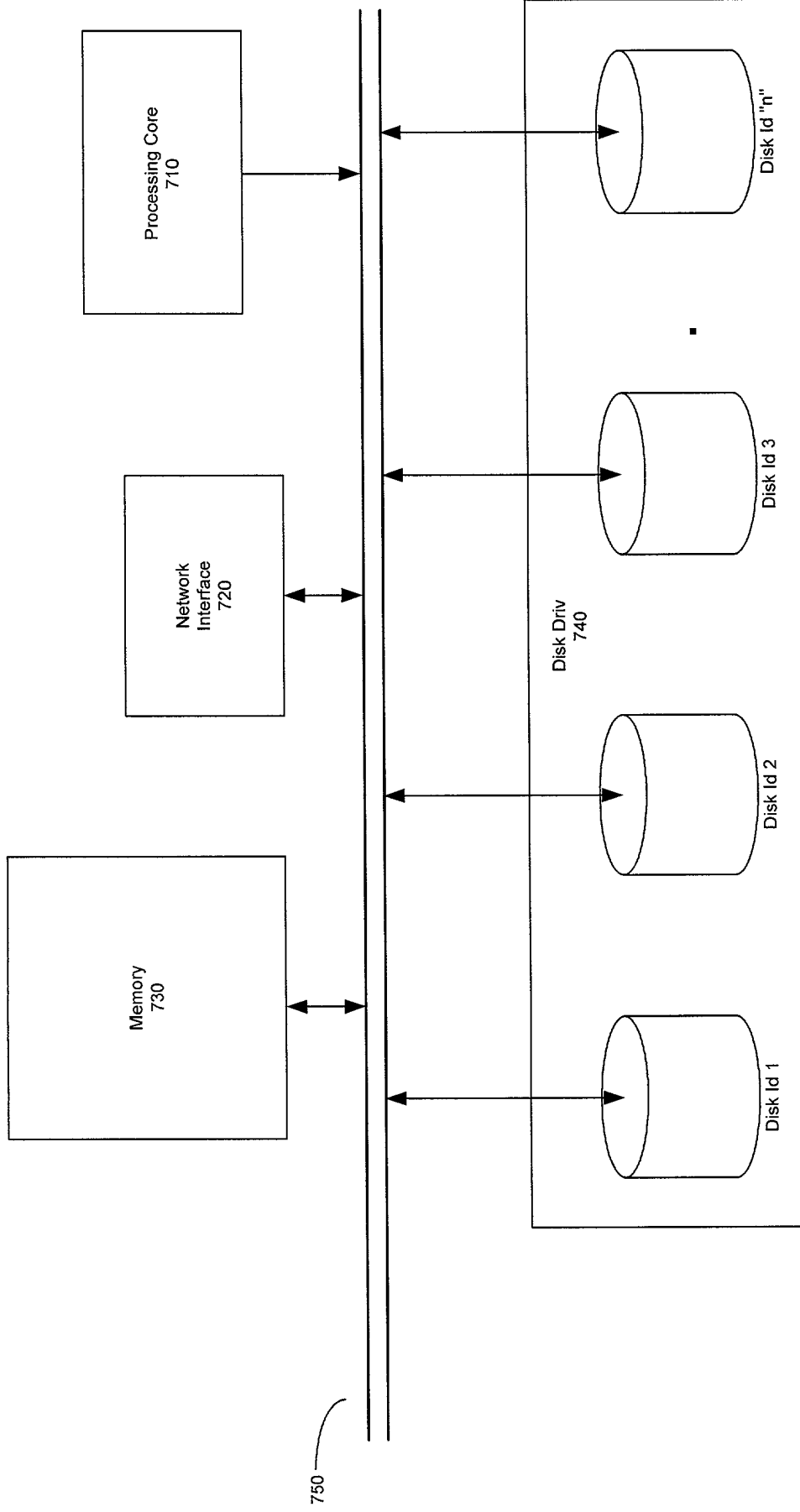
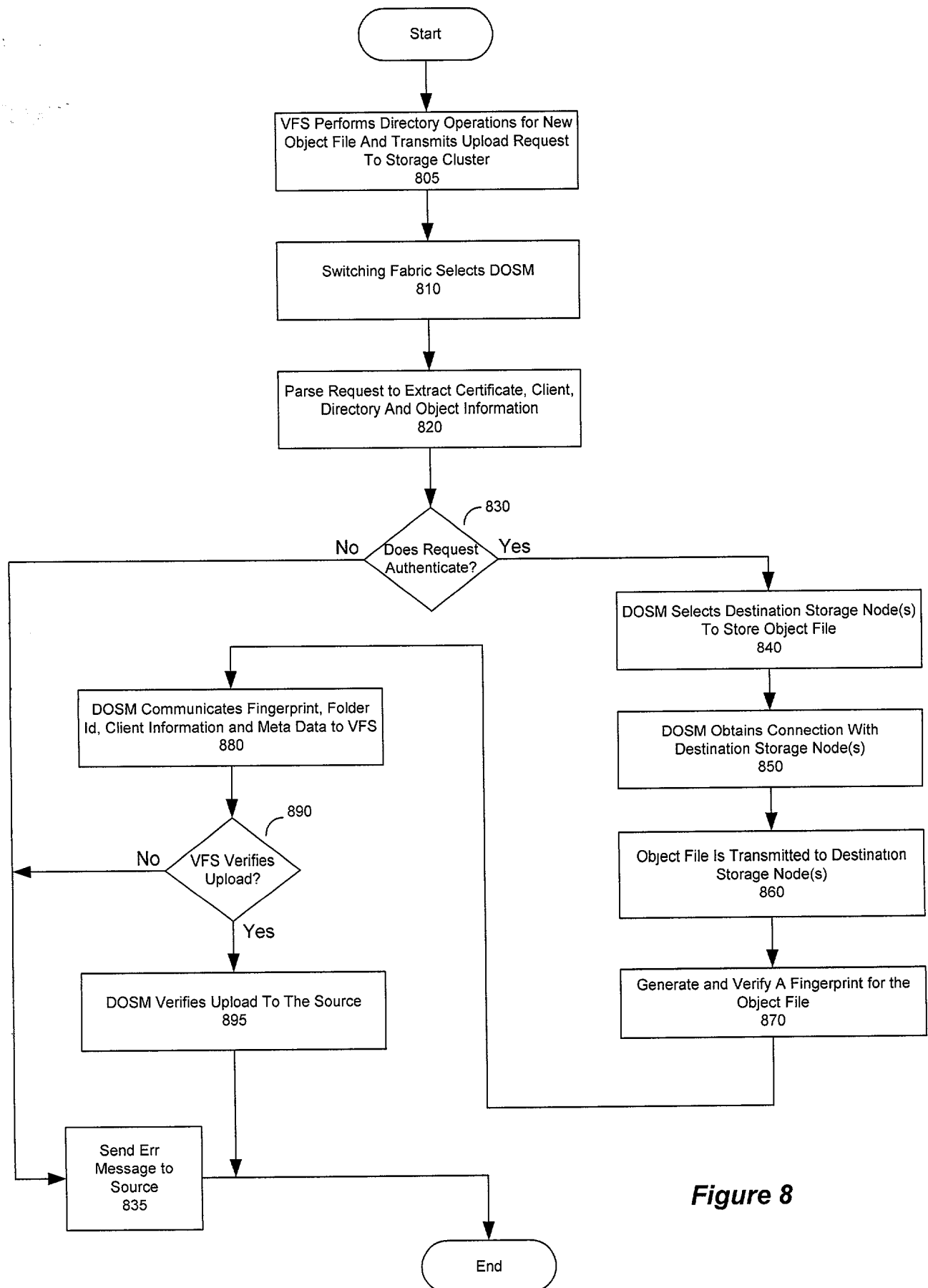
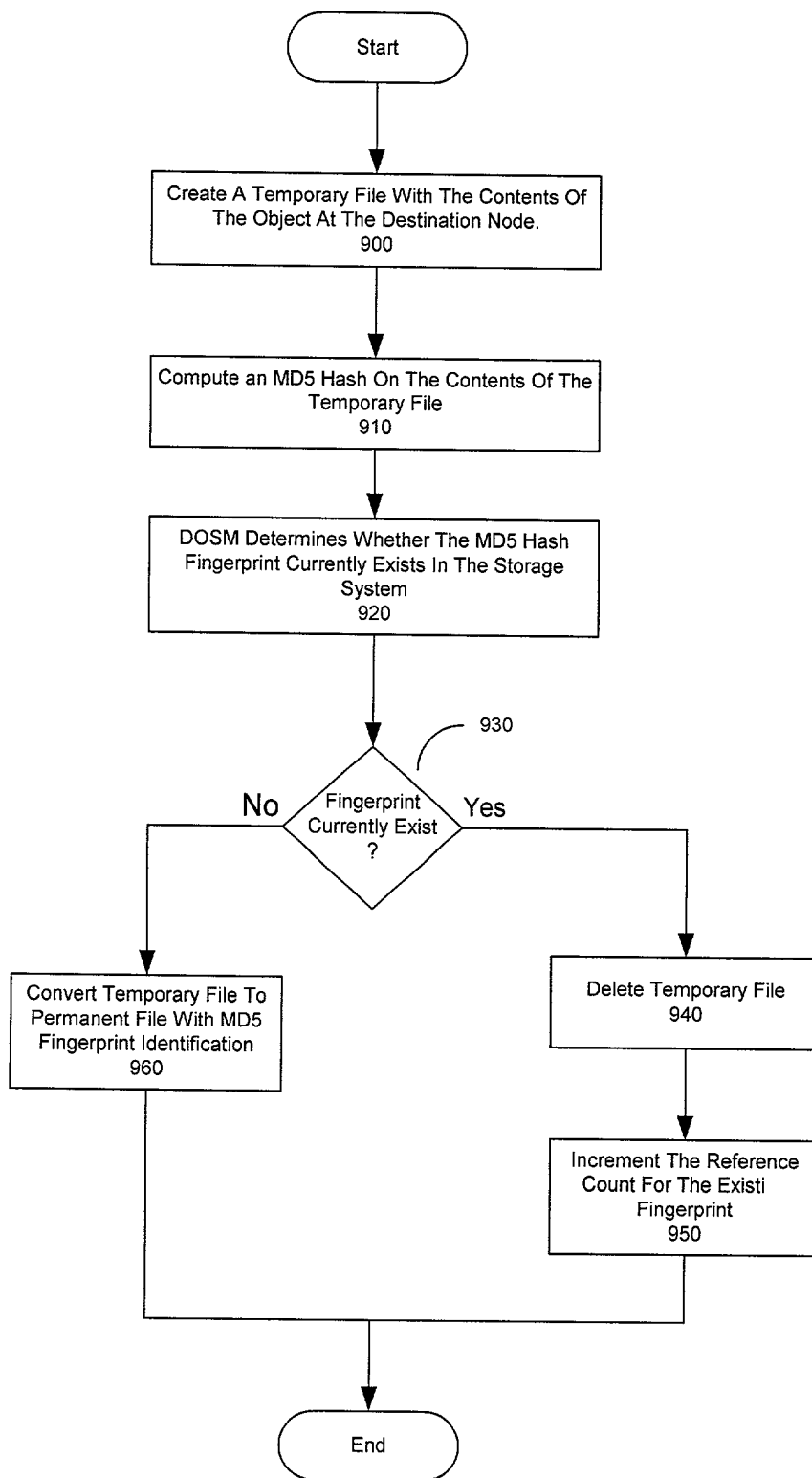


Figure 7

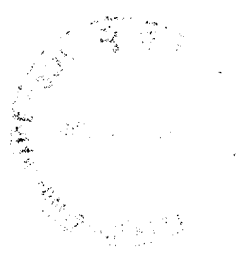


**Figure 8**

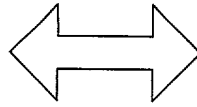




**Figure 9**



File Upload/Download Operations



Load Balancing Fabric  
310

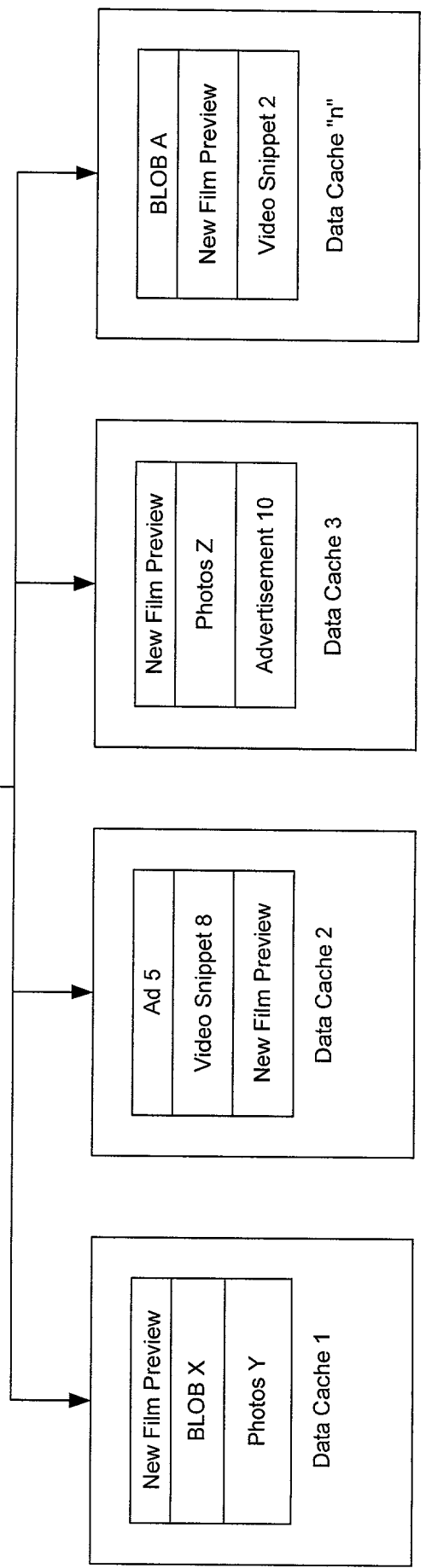
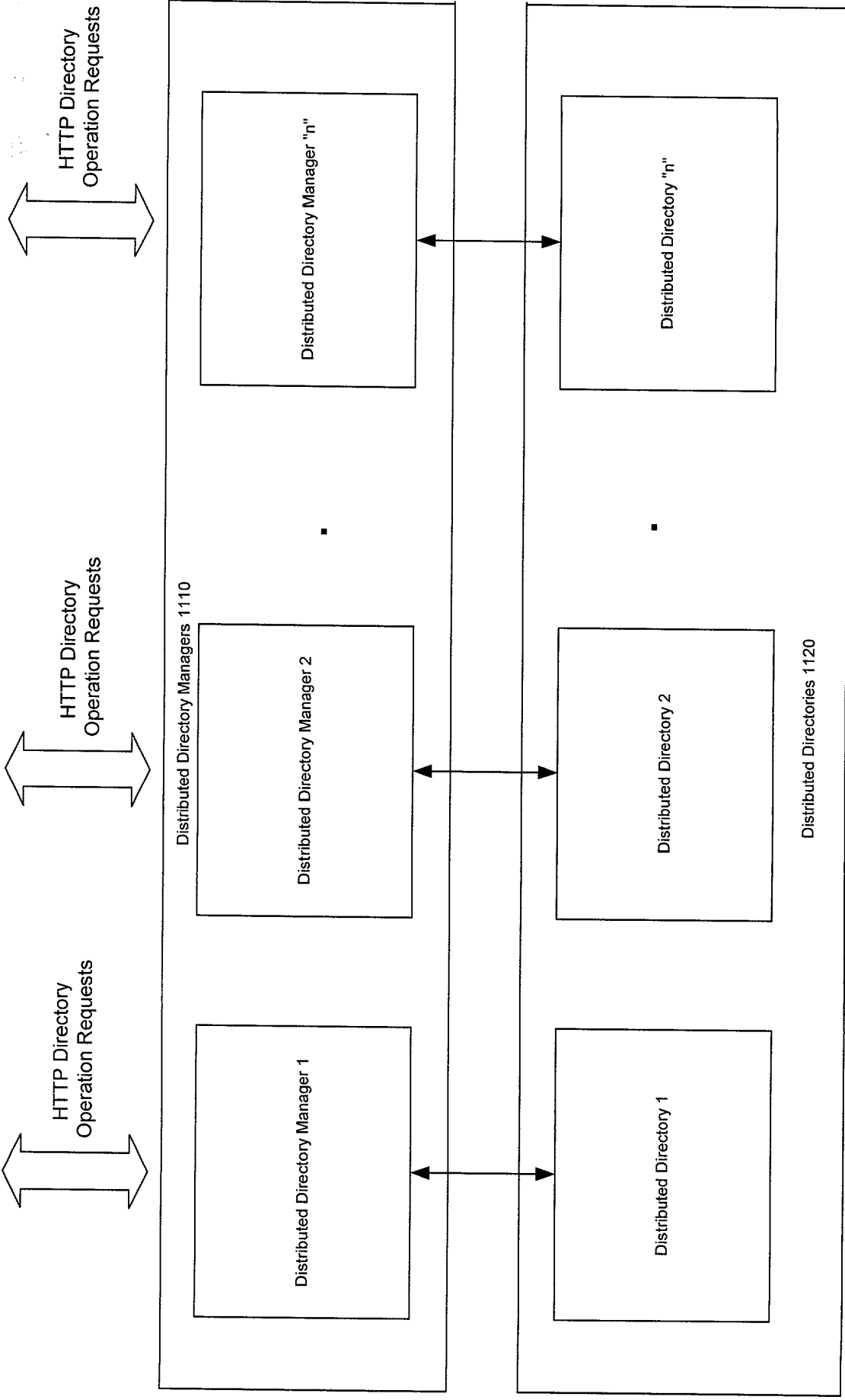


Figure 10



**Figure 11**

Customer Table

Customer Id	Customer Name	Customer Reserved Fiel
1	Customer	[Customer stores data ...]
2	Customer	[Customer stores data ...]
3	Customer C	[Customer stores data ...]
4	Customer D	[Customer stores data ...]

1200

Folder Tab

Customer Id	Folder Id	Folder Parent Id	Metadata
3	2	-	[Reserved]
3	100	2	[Reserved]
3	251	2	[Reserved]
3	166	251	[Reserved]

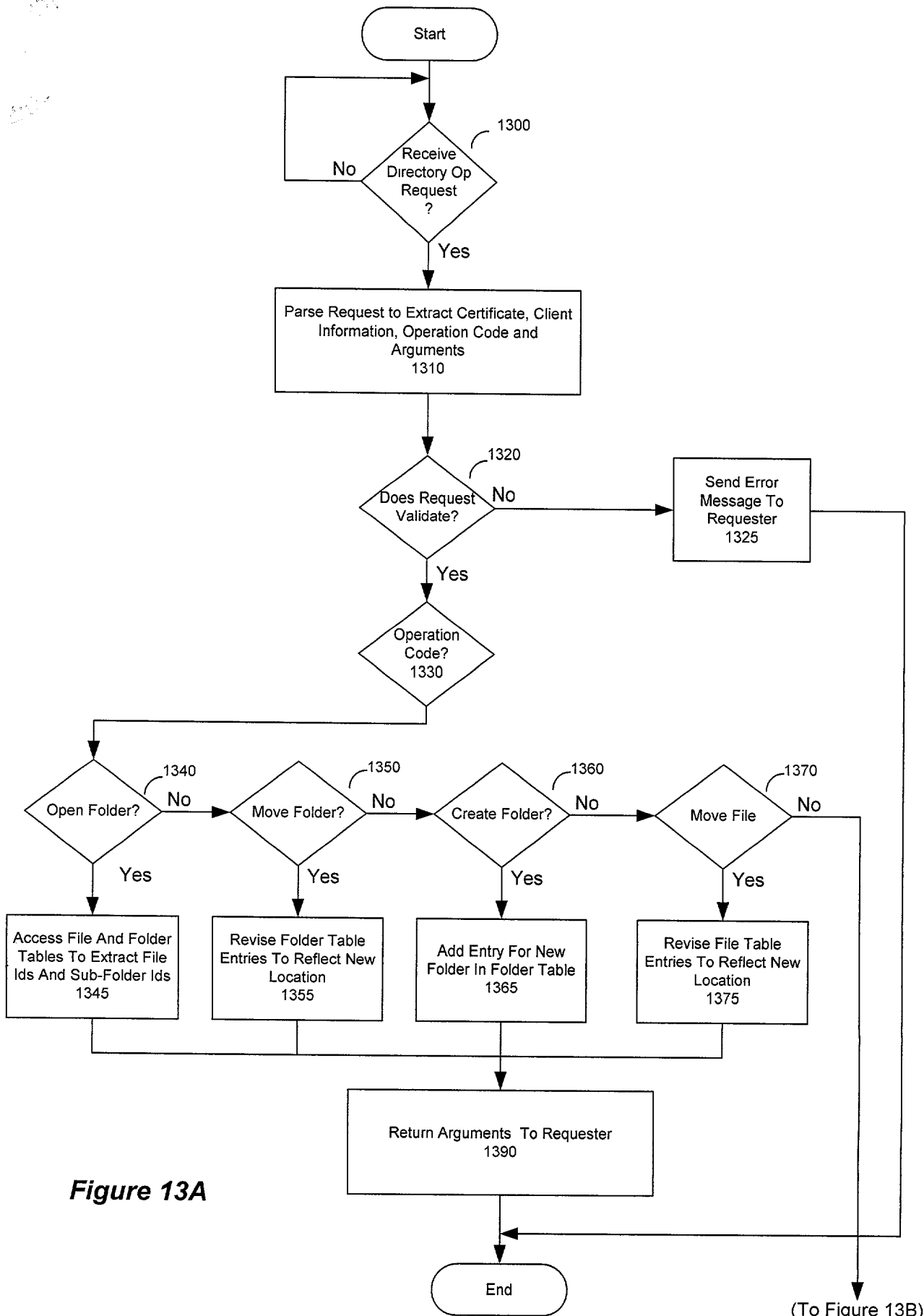
1210

File Table

Customer Id	File Handle	Folder Id	Folder Parent Id	Metadata
3	52.MD5	100	2	[Reserved]
3	55.MD5	100	2	[Reserved]
3	99.MD5	166	251	[Reserved]
3	67.MD5	166	251	[Reserved]

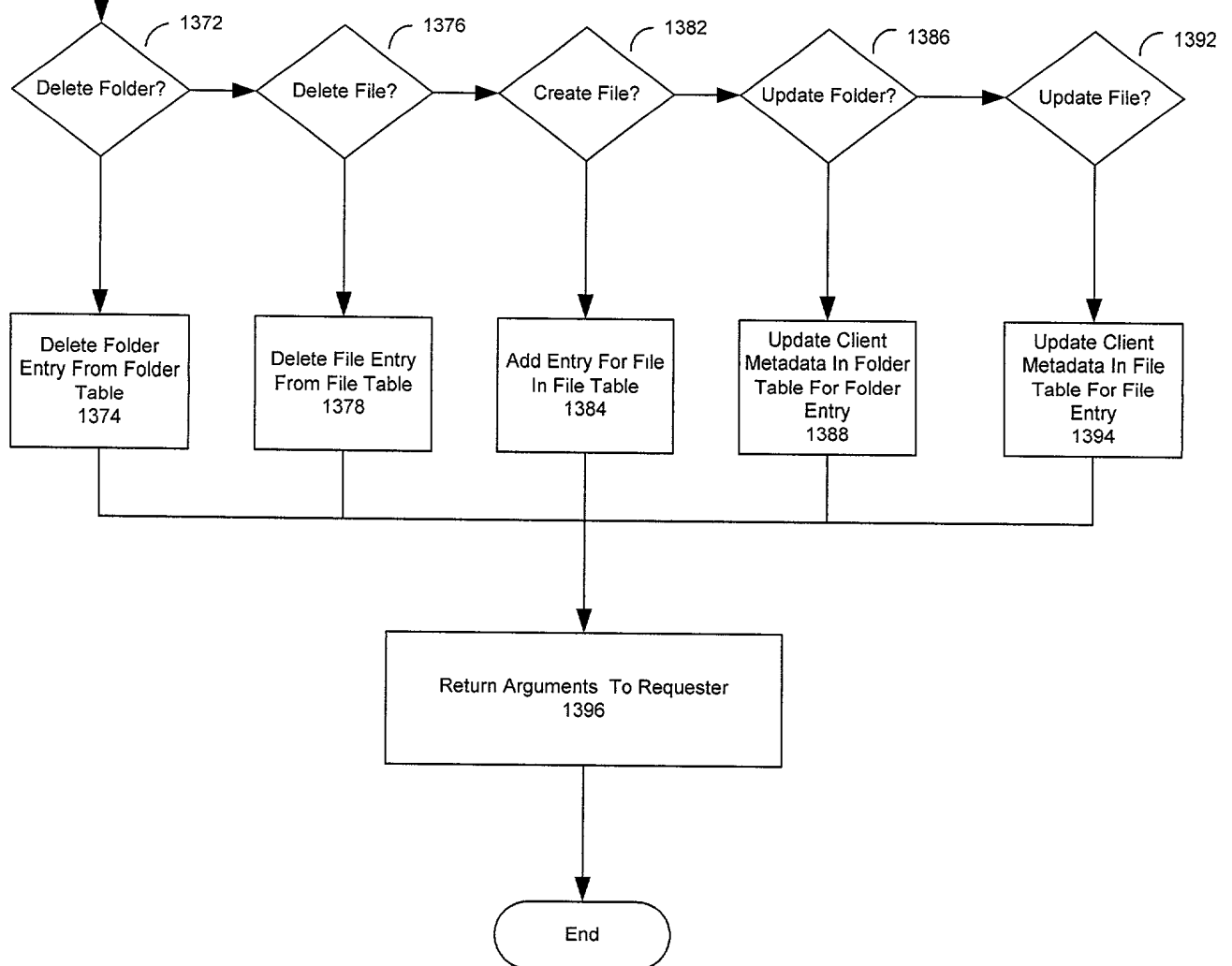
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**Figure 12**

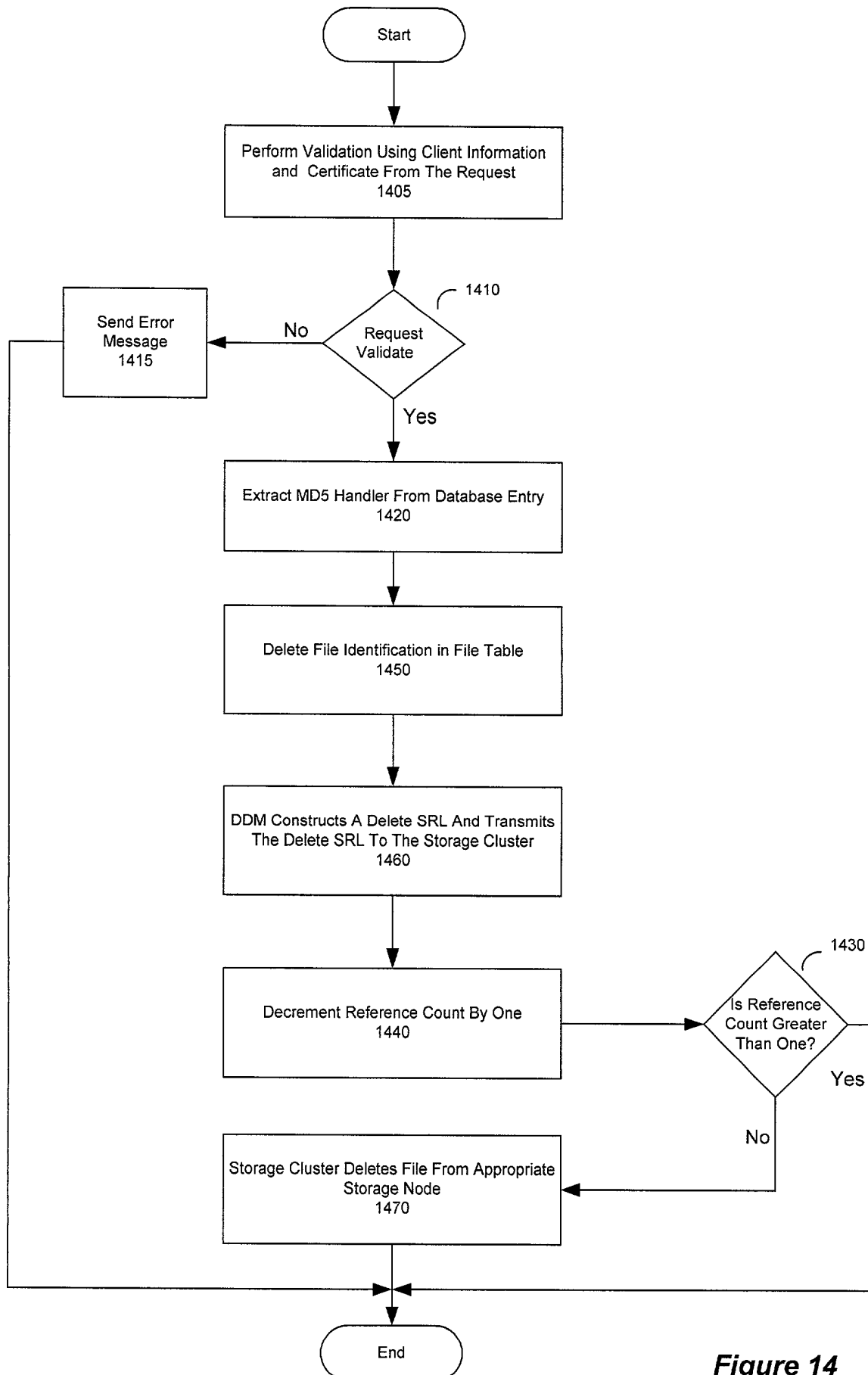


**Figure 13A**

(From Figure 13A)

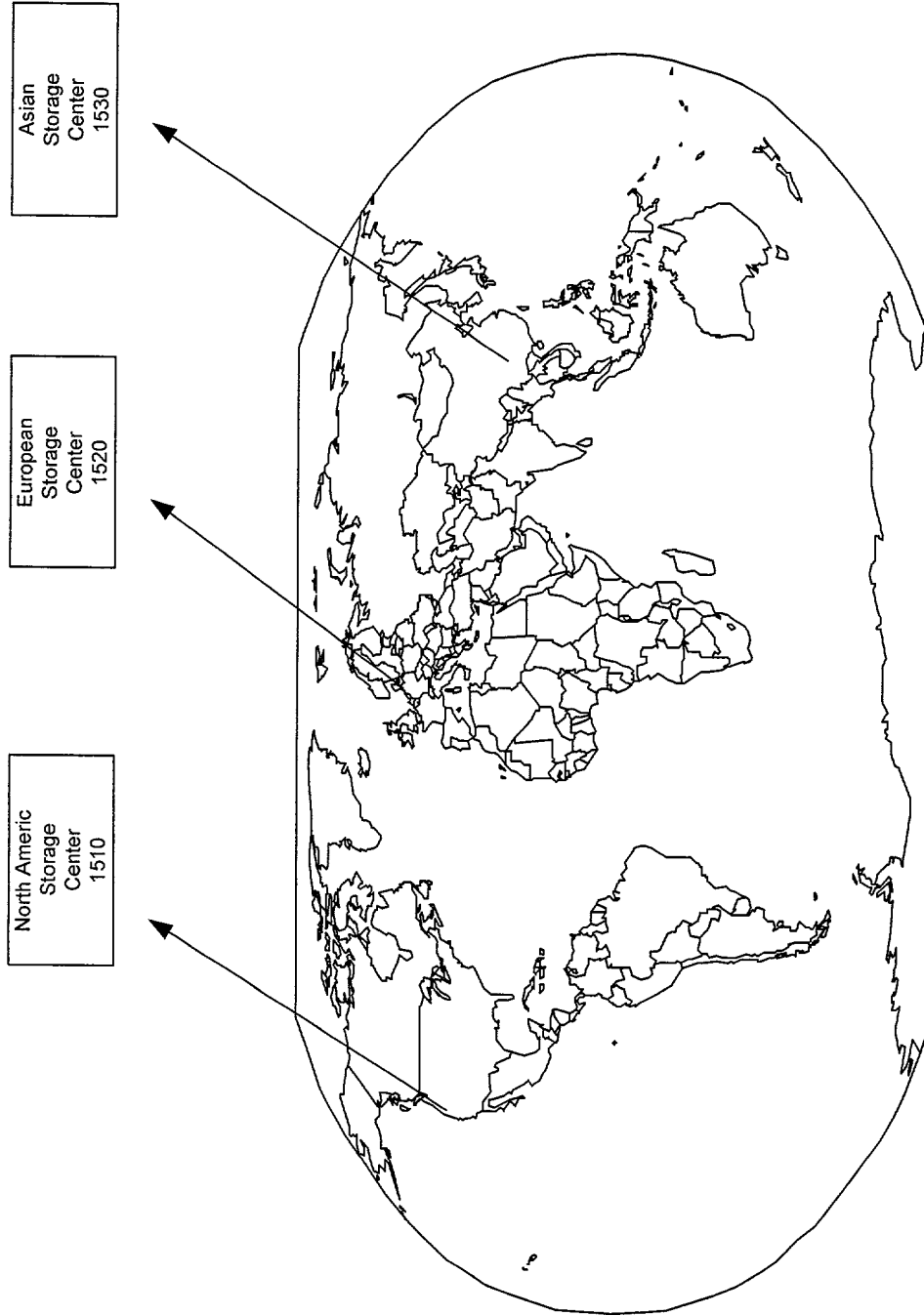


**Figure 13B**



**Figure 14**

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FOREIGN AGRICULTURAL SERVICE  
WASHINGTON, D.C. 20250



**Figure 15**



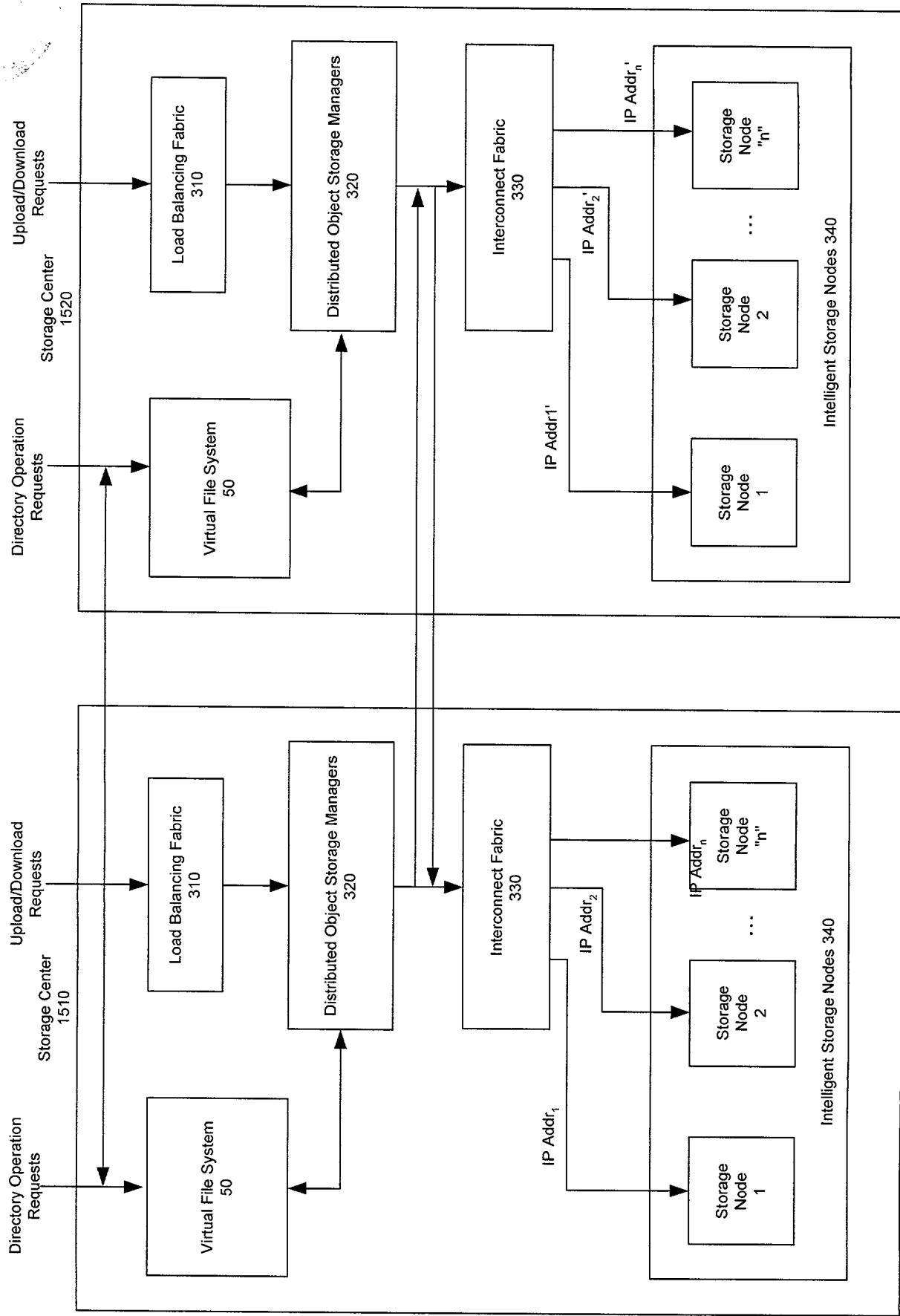


Figure 16

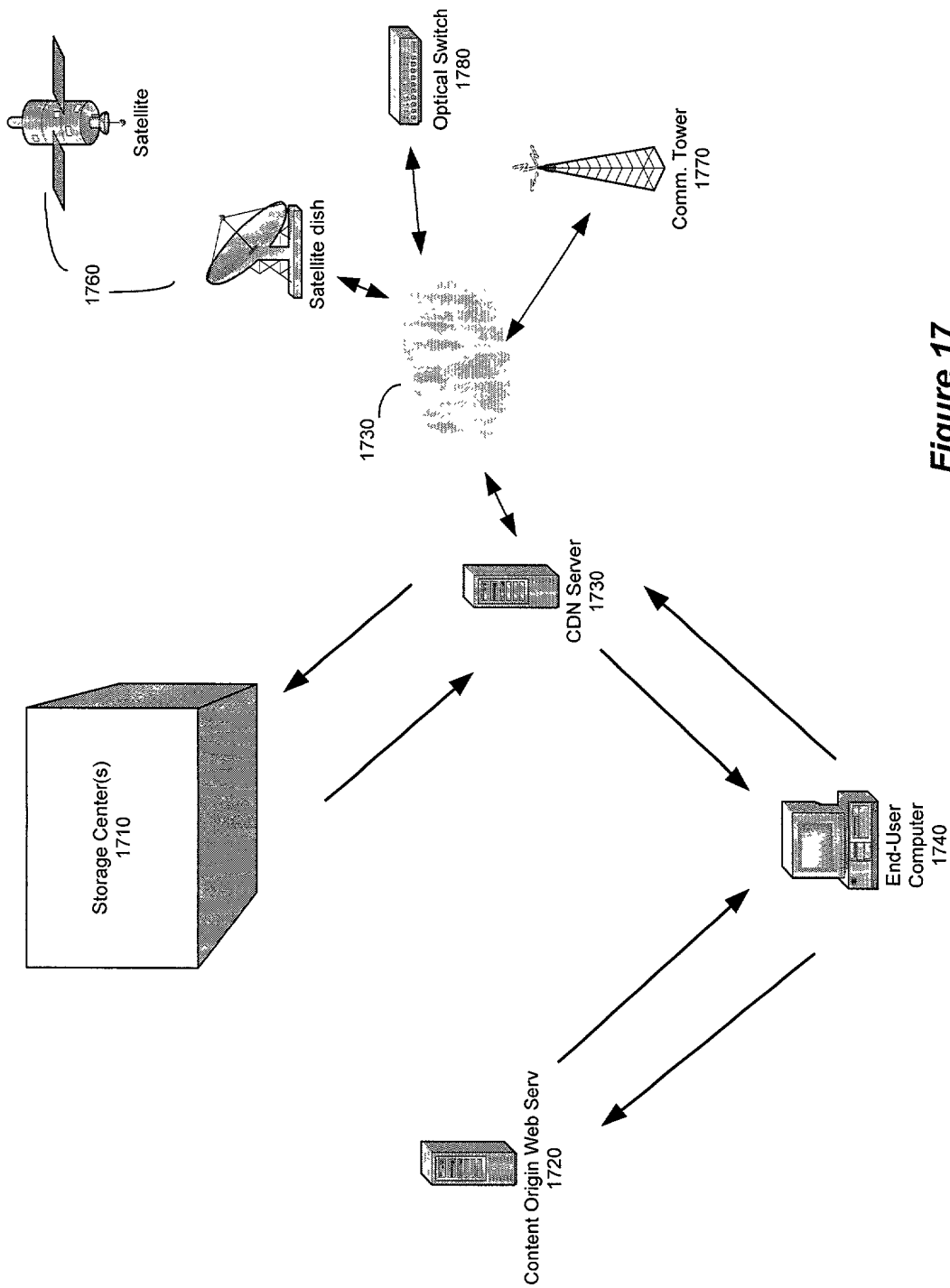
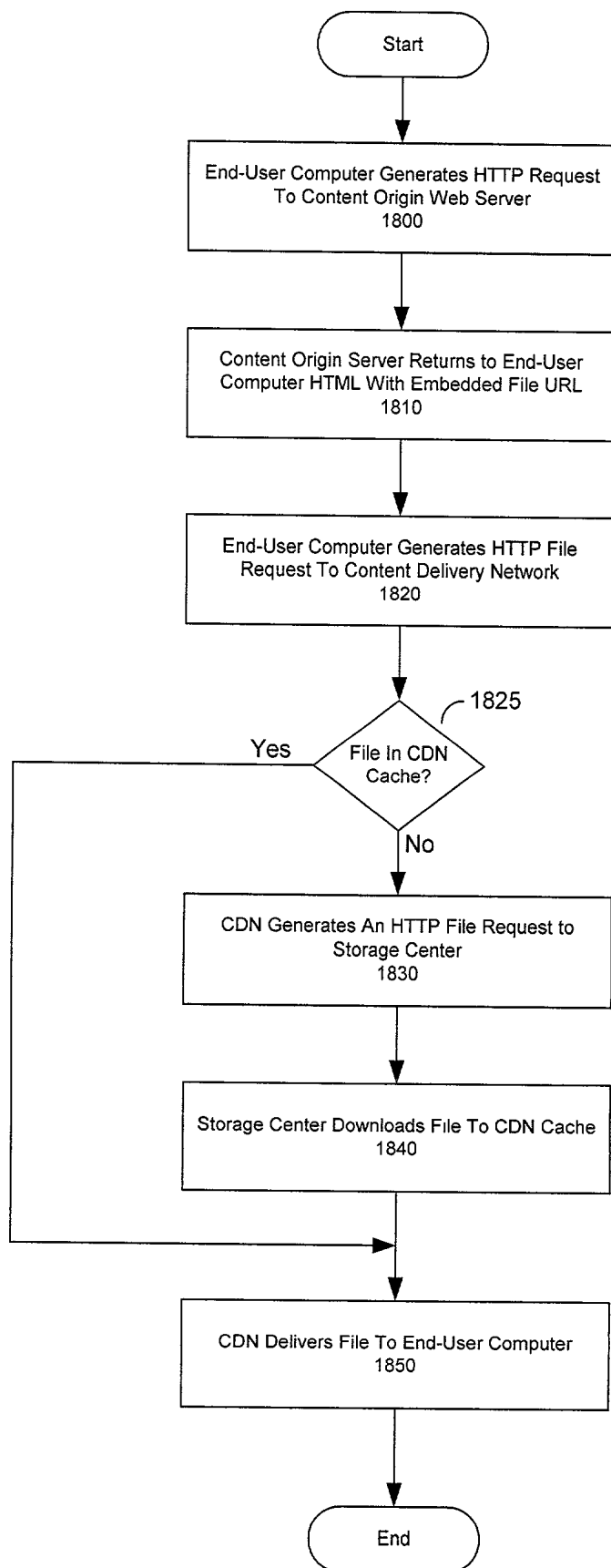
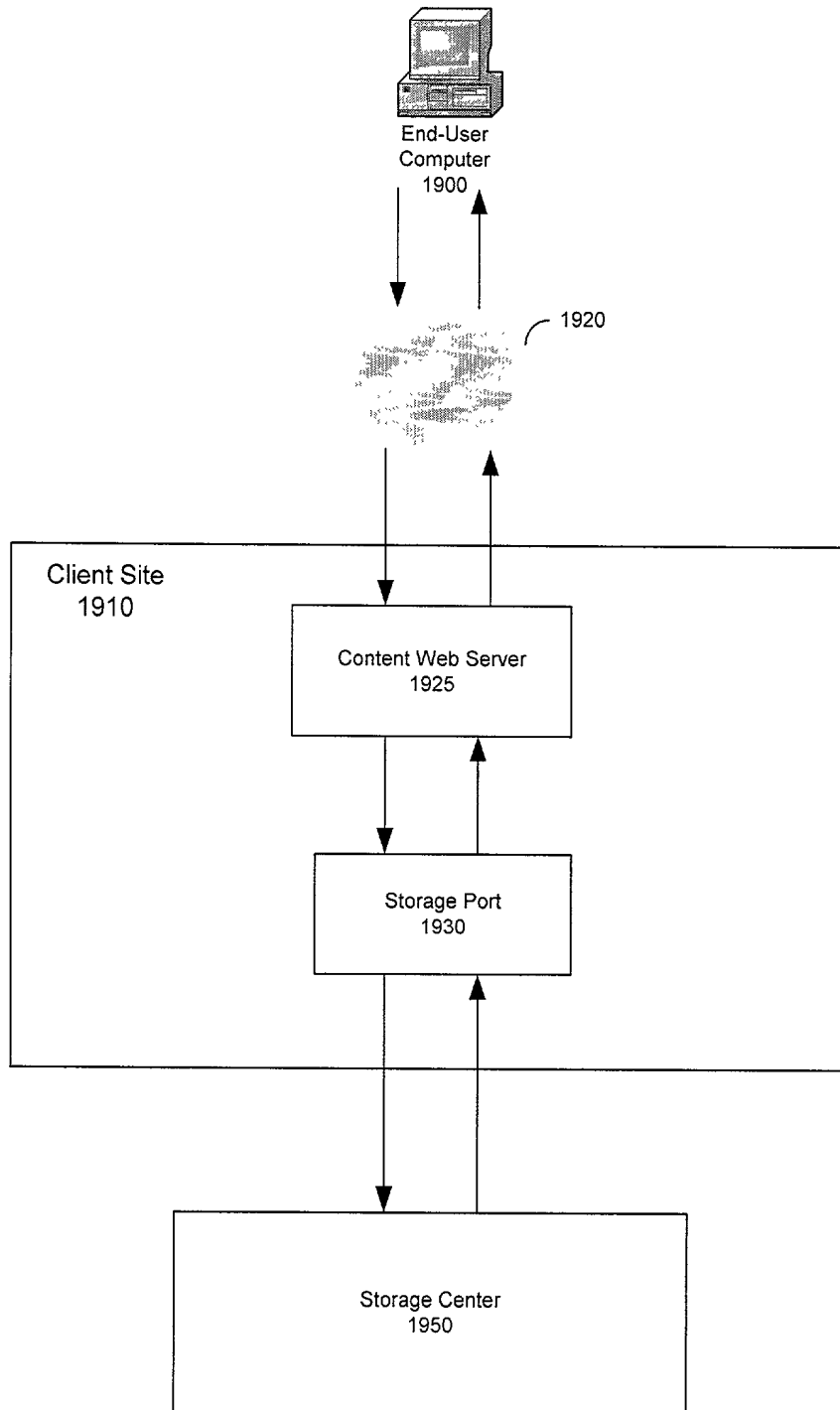


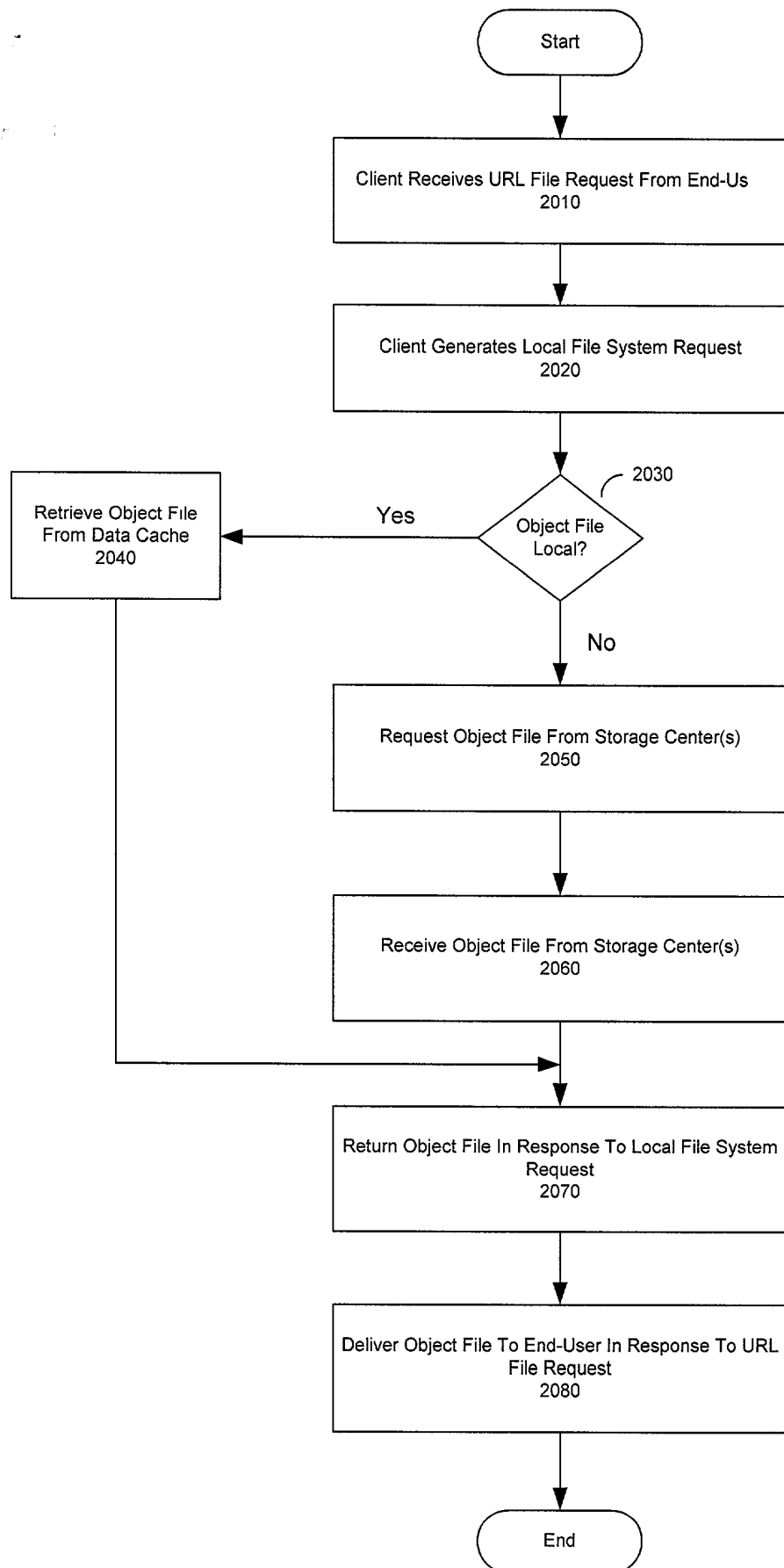
Figure 17



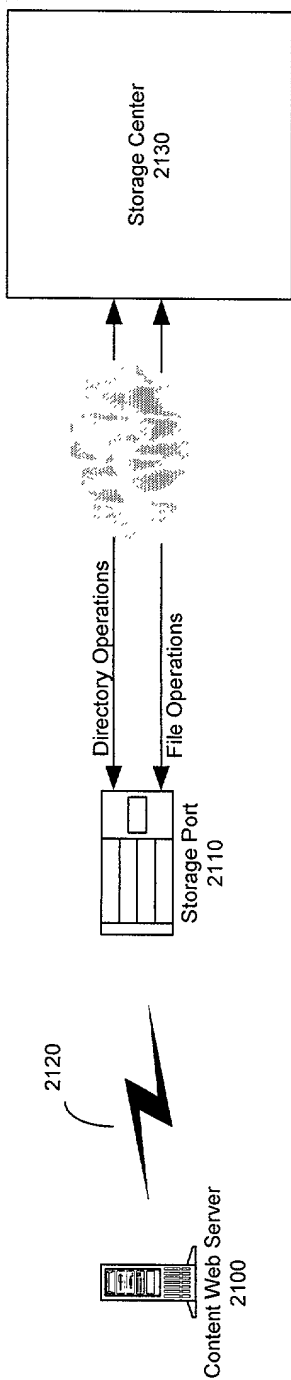
**Figure 18**



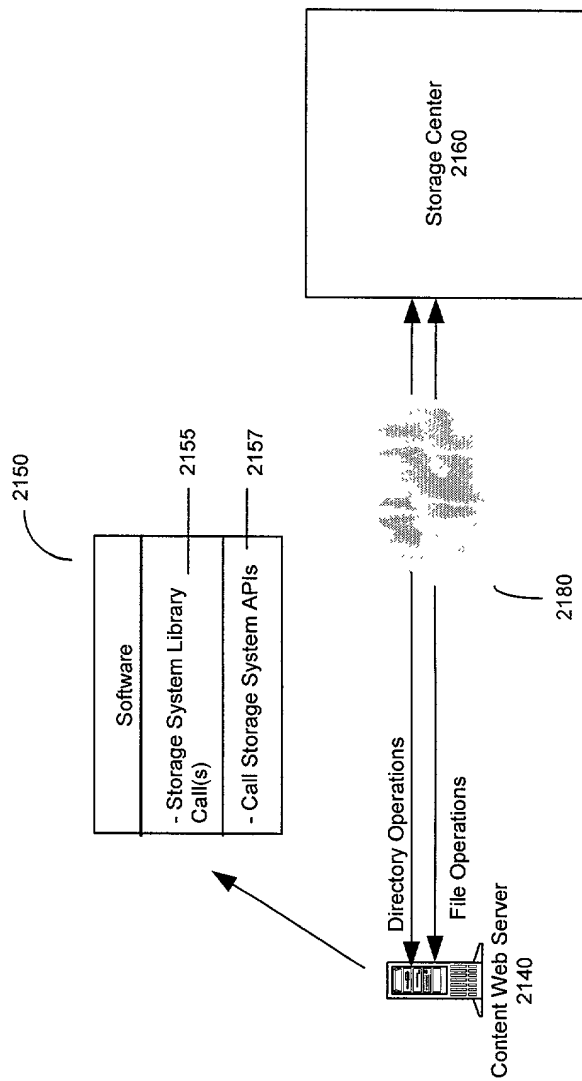
**Figure 19**



**Figure 20**



**Figure 21a**



**Figure 21b**

FIG. 22 is a block diagram of a system architecture. The system includes a Processing Core 2210, Memory 2230, and a Storage Port 2200. The Storage Port 2200 is connected to the Processing Core 2210 and the Memory 2230. The Storage Port 2200 is also connected to a Network Interface(s) 2220 and a Storage Port DataStore 2240. The Network Interface(s) 2220 is connected to Network Interface Card 1, Network Interface Card 2, and Network Interface Card N. The Storage Port DataStore 2240 is connected to Disk Drive 1 and Disk Drive "n".

Storage Port  
2200

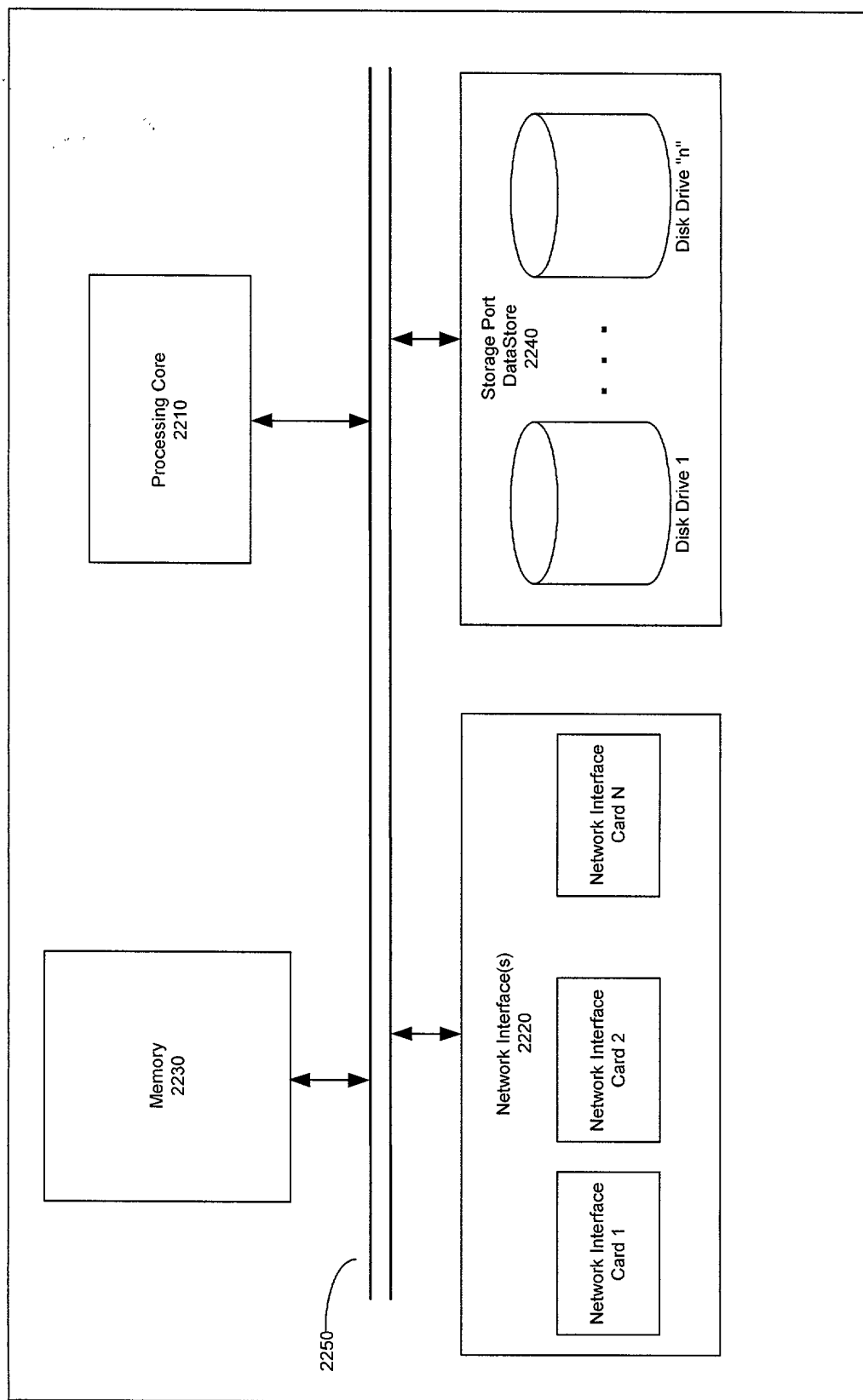
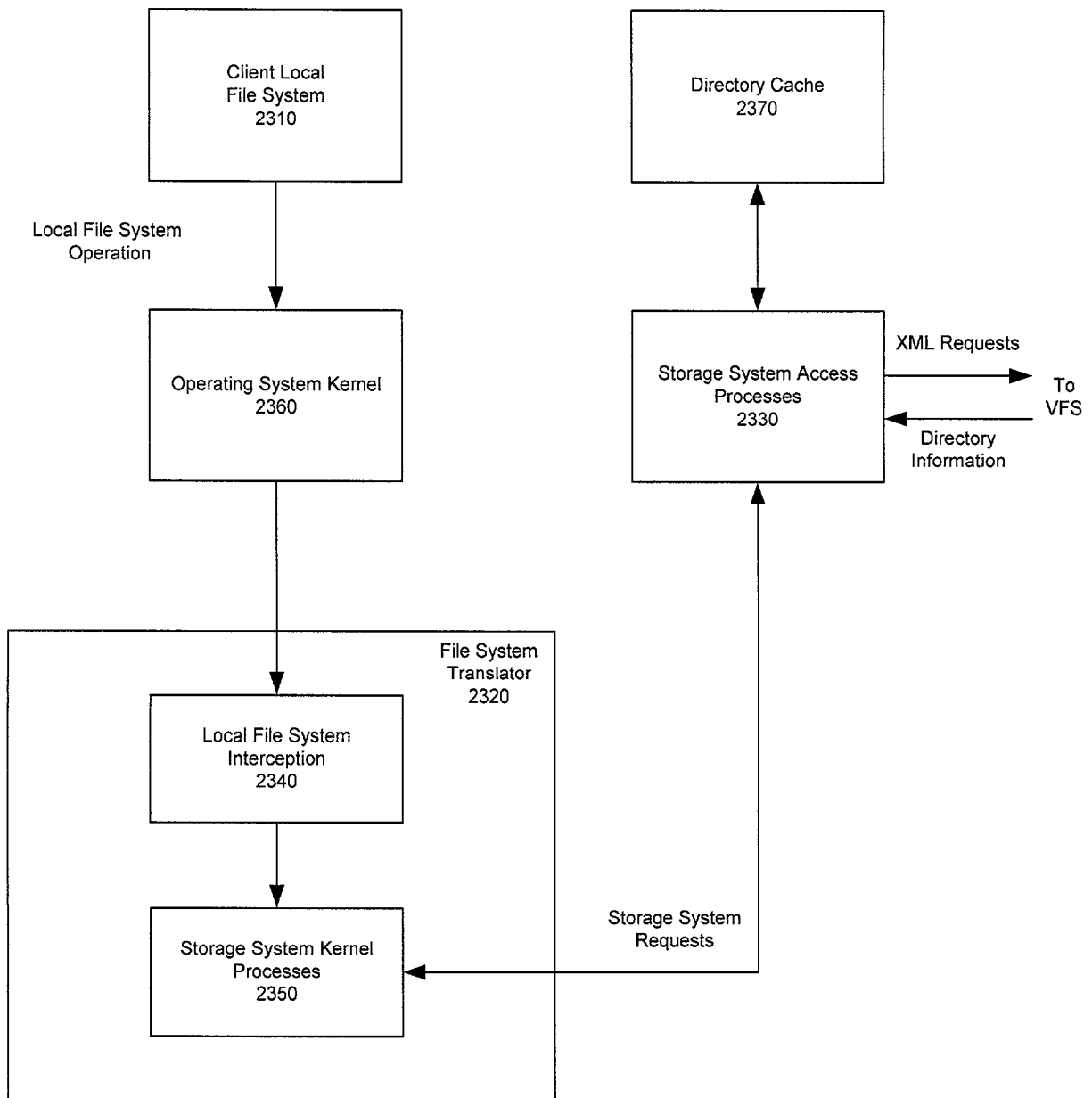


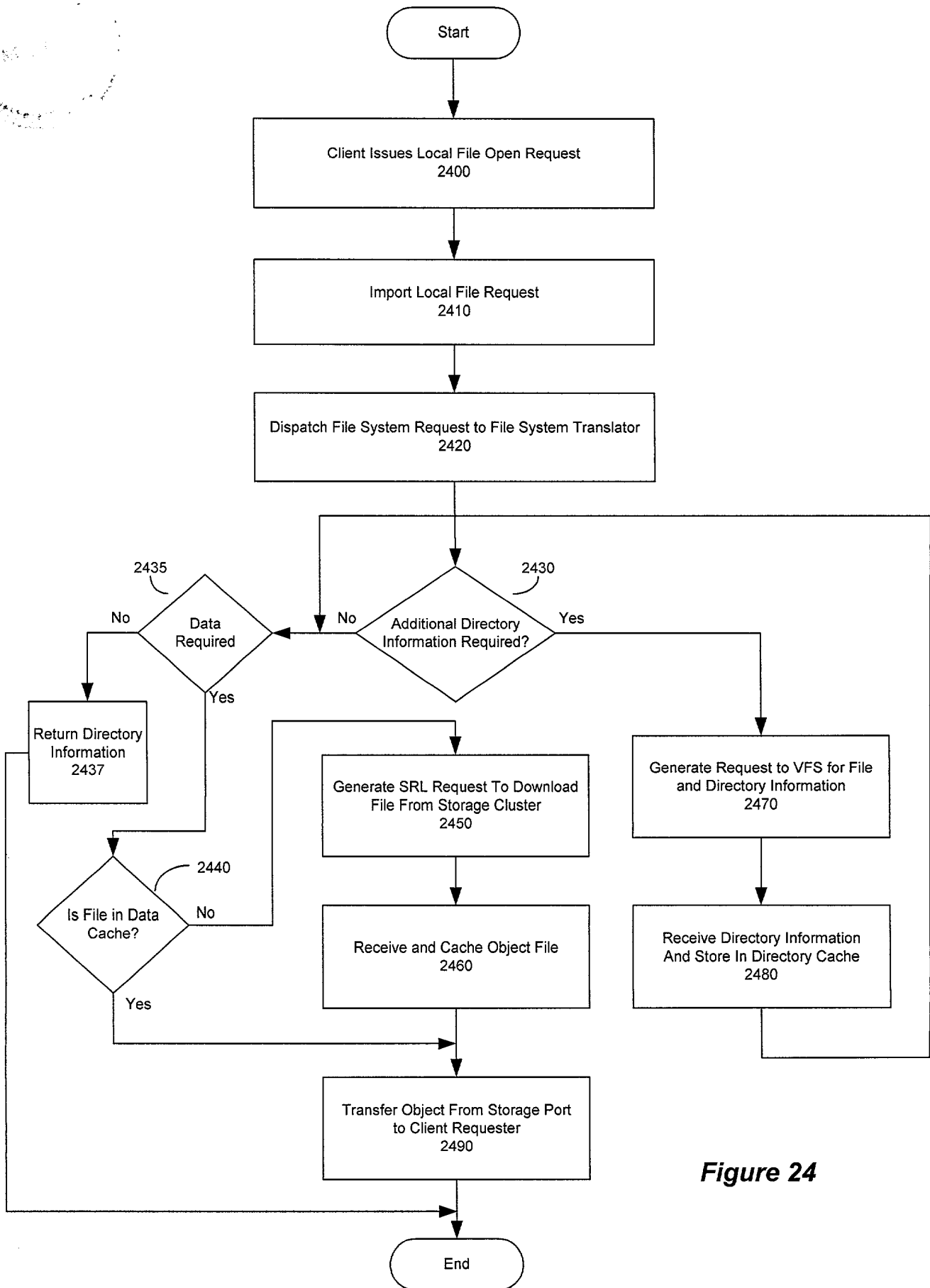
Figure 22

2300



**Figure 23**





**Figure 24**

2600

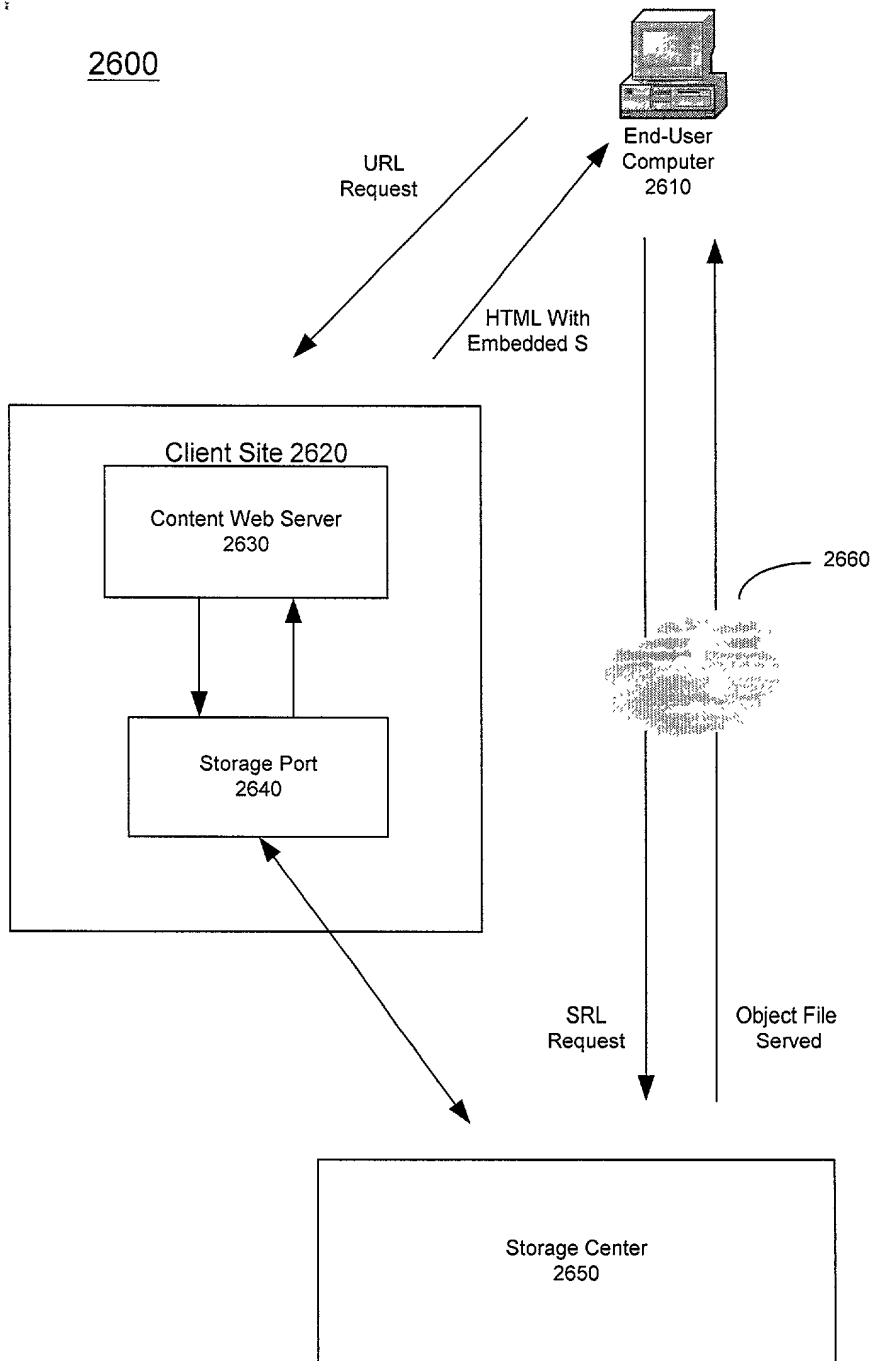
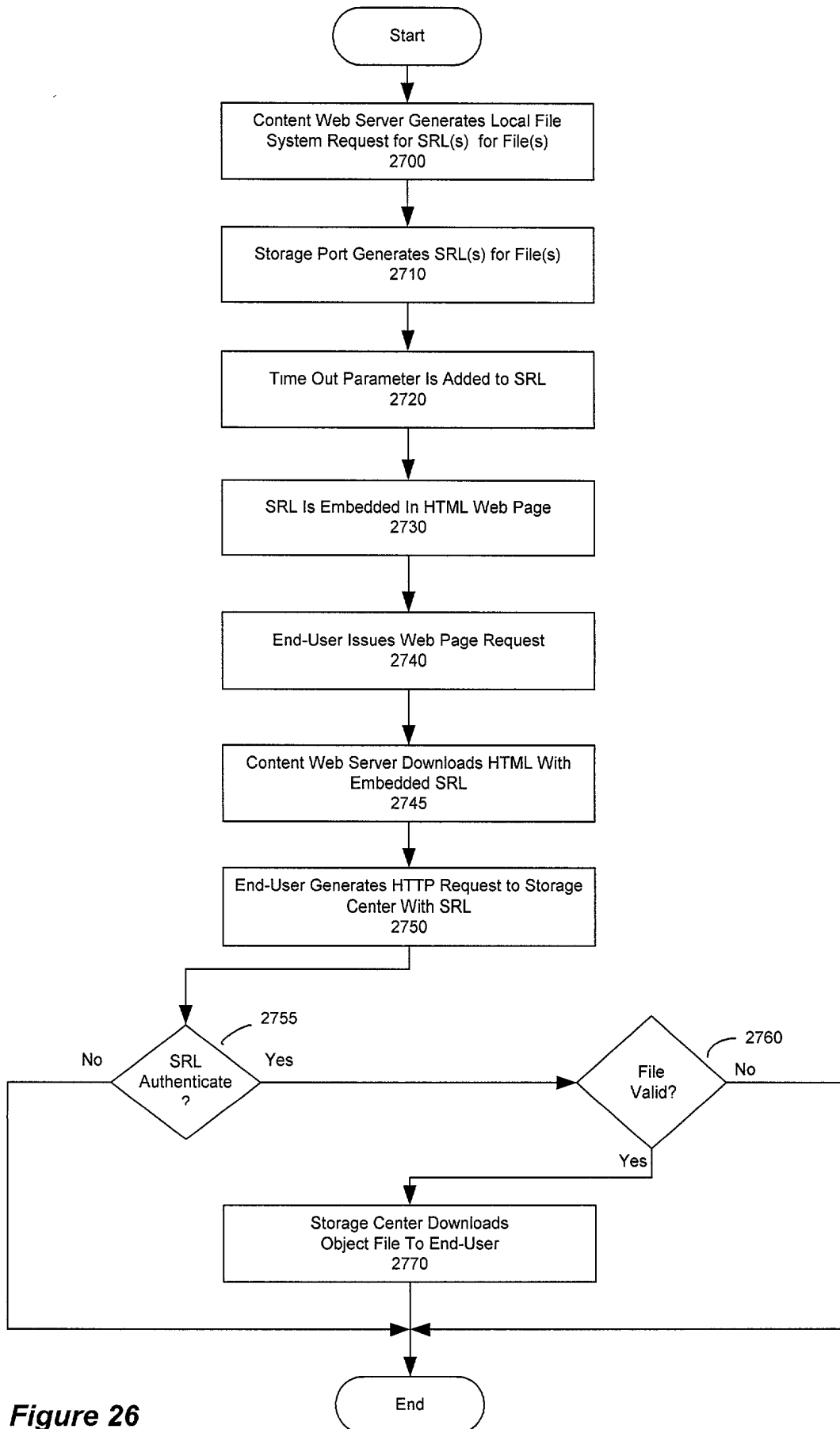
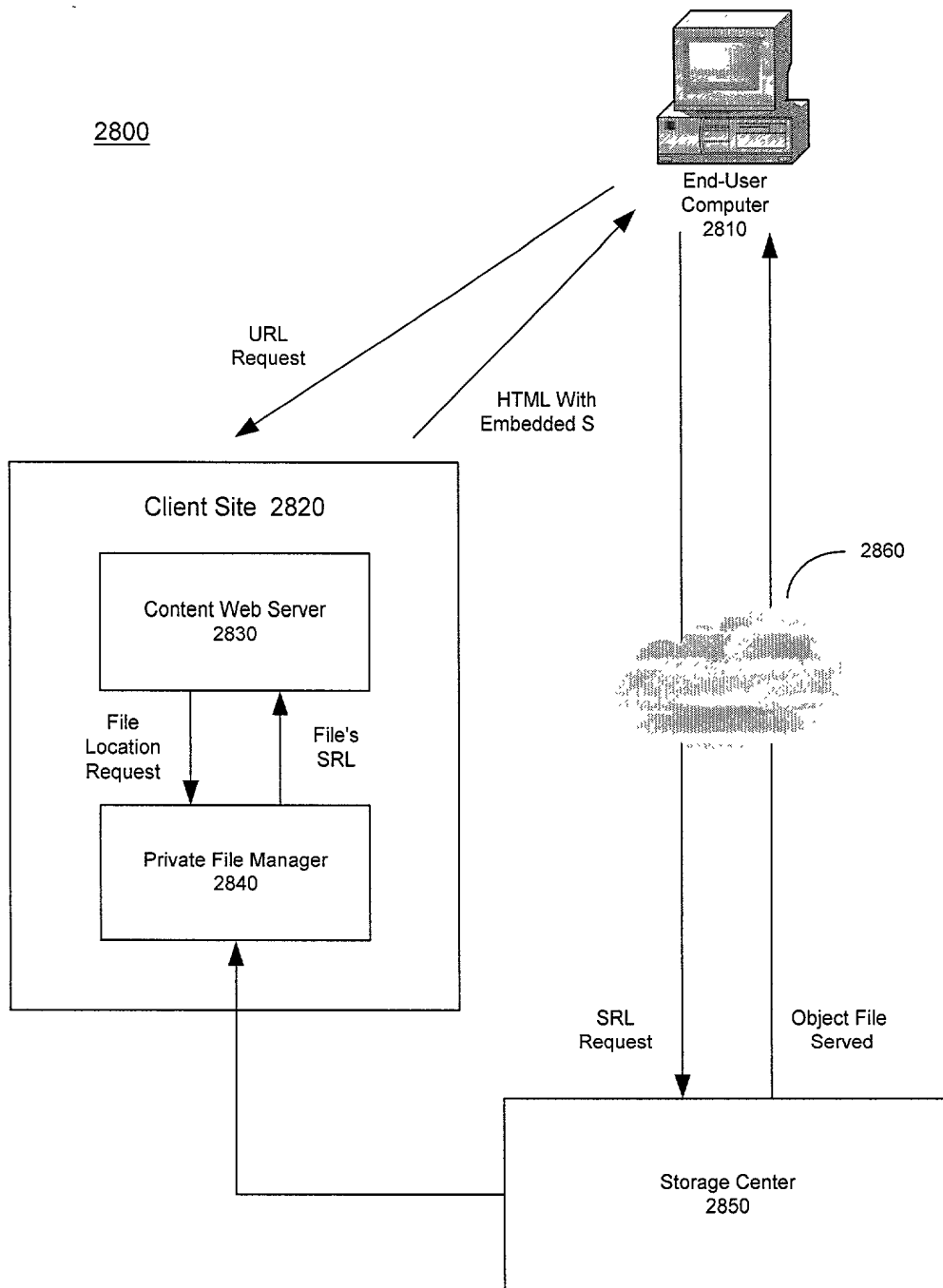


Figure 25

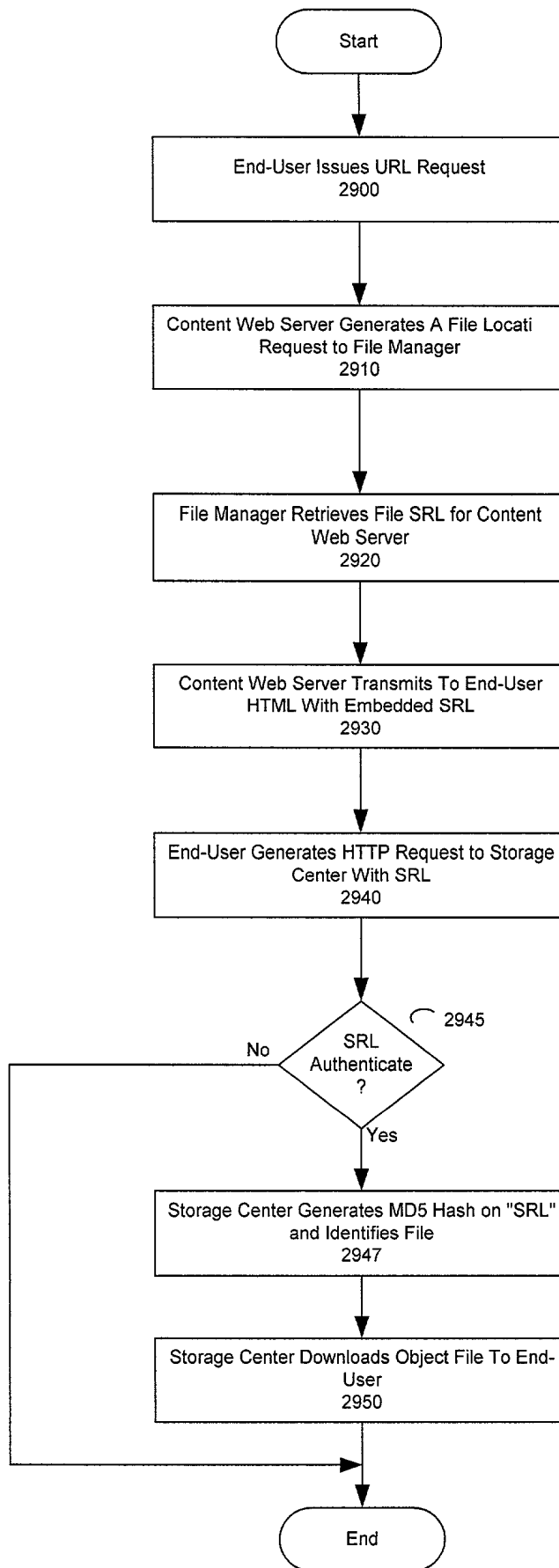


**Figure 26**

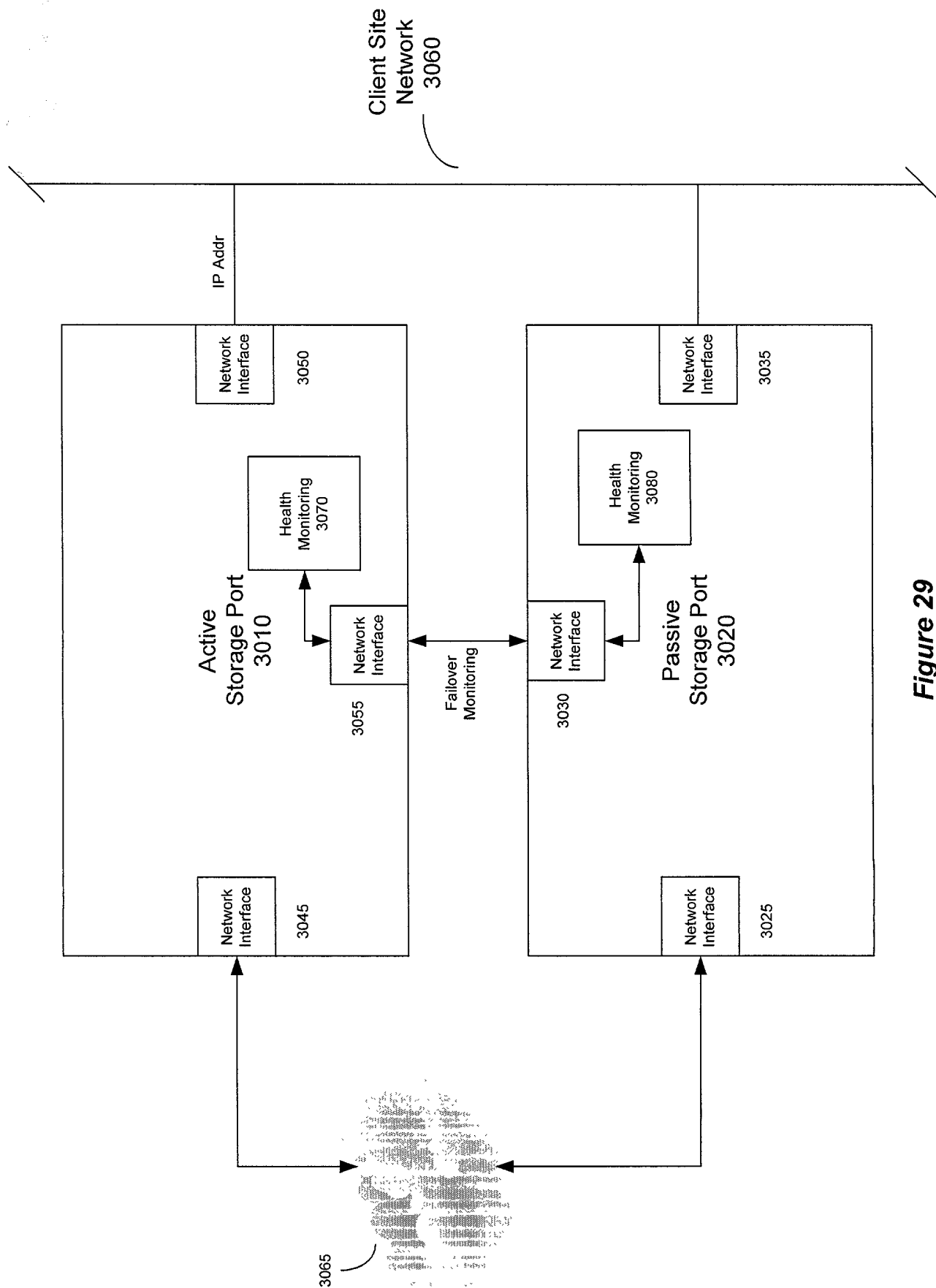
2800

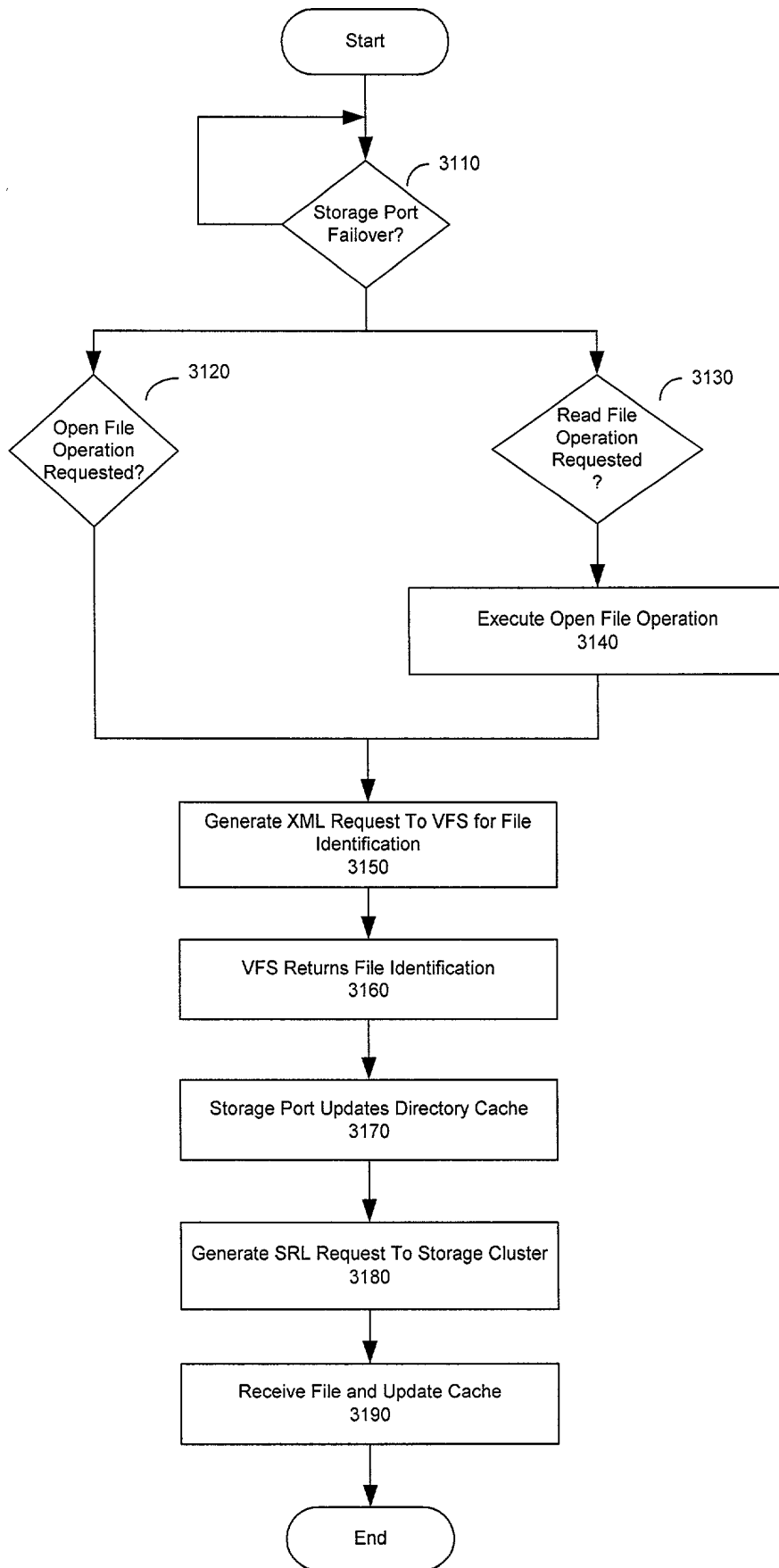


**Figure 27**

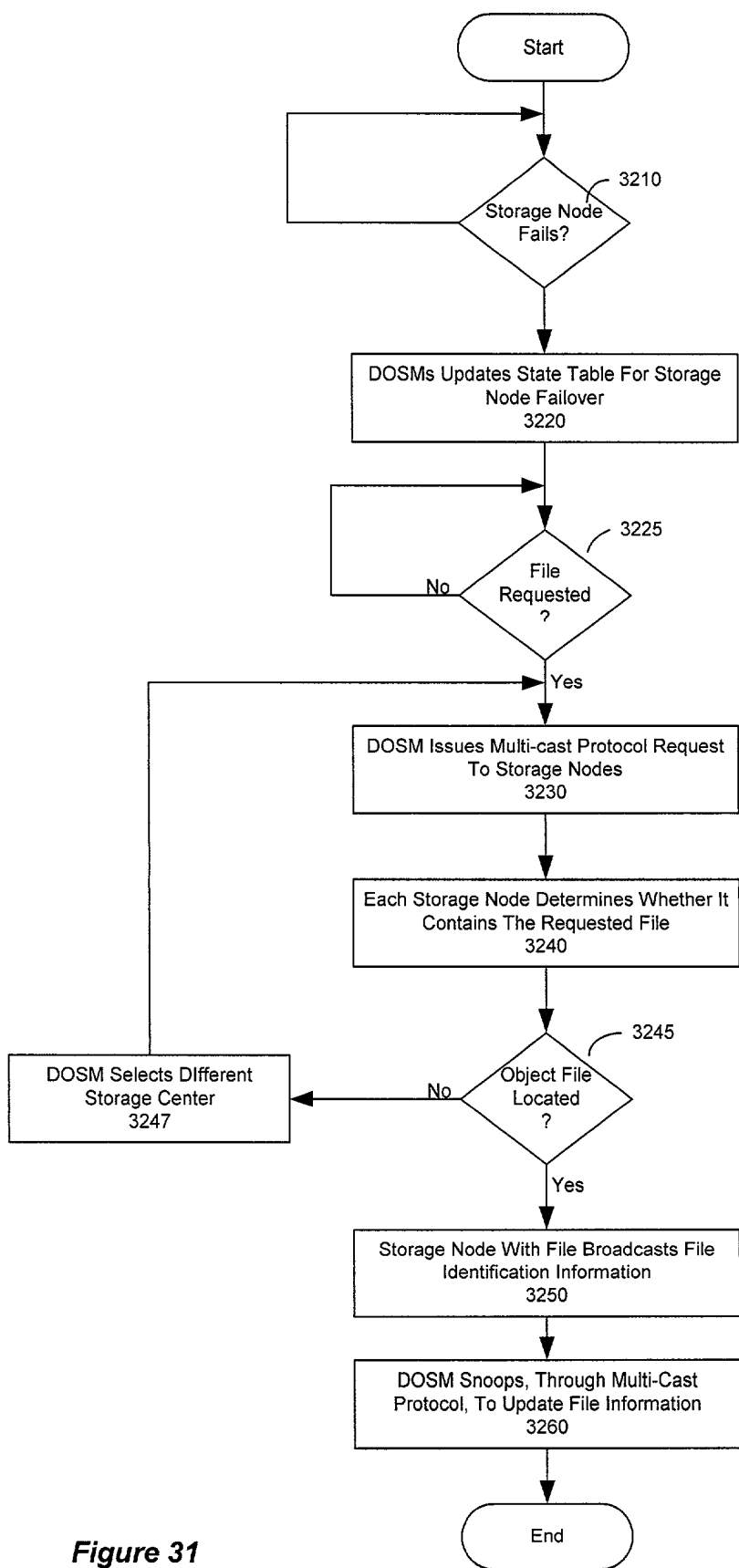


**Figure 28**





**Figure 30**



**Figure 31**